

SMART SURFACES

NORTH CAROLINA PUBLIC HEALTH ASSOCIATION

PROJECT OVERVIEW

North Carolina Public Health Association worked closely with the City of Charlotte to expand awareness on extreme heat, engage with community members, and broaden a network of partners working to advance climate mitigation solutions. In 2025, NCPHA conducted focus groups with local communities on extreme heat and presented the findings at NCPHA's Fall Educational Conference. Lastly, they developed a resource guide for local health departments interested in partnering with city and county governments to promote the health benefits of Smart Surfaces.

HIGHLIGHTS AND ACCOMPLISHMENTS

Heat Mitigation Focus Groups

In the Summer of 2025, NCPHA partnered with CleanAIRE NC to conduct 5 focus groups and mini listening sessions with community residents, faith-based leaders and members, emergency responders, and healthcare providers. They collected some incredible insights from this research to provide recommendations for local leaders and policymakers. The findings will help inform and support NCPHA's advocacy efforts for the implementation of Smart Surfaces as effective heat mitigation solutions throughout Charlotte. NCPHA presented the findings of this research at CleanAIRE NC's annual conference and during one of the Affiliate poster sessions at APHA's 2025 Annual Meeting.

Public Health Profiles

NCPHA's City of Charlotte partners had requested public health data for the Corridors of Opportunity program in Charlotte, which focuses on six underinvested areas in the city. SCPHA explored various data sources and created public health profiles for the six areas as well as a Tableau map 'Social Factors Influencing Heat-Related Effects in Charlotte Corridors' displaying disparities at the zip code level regarding access to key resources that alleviate heat vulnerability and an interactive map of cooling centers in the Charlotte areas.

Public Awareness:

NCPHA collaborated with partners to participate in key events and raise awareness about the importance of heat mitigation solutions like Smart Surfaces for the health of communities. These included three panel discussions at NCPHA's 2024 Fall Educational Conference, CleanAIRE NC's 2025 BREATHE conference, and a local event hosted by The Urban Design Center and Office of Sustainability & Resilience in Charlotte that also provided a screening of *Cooked: Survival by Zip Code*. NCPHA partnered with the American Lung Association to provide NCPHA members with a webinar focused on Smart Surfaces and extreme heat.



NCPHA partnered with CleanAIRE NC to conduct focus groups to explore the impacts of extreme heat and potential solutions for communities in Charlotte, NC. The hybrid focus groups gathered insights from community members living in high-exposure neighborhoods, as well as faith-based leaders, healthcare providers, and emergency responders.



NCPHA invited representatives from CleanAIRE NC, City of Charlotte, NC DHHS Climate & Health team, and UNC Charlotte Heat Mappers for a panel discussion 'Navigating the Intersection Between Public Health and Climate Change' at NCPHA's 2024 Fall Educational Conference in Cherokee, NC.

INITIATIVES/COALITIONS

NCPHA participated in the City of Charlotte's GreenPrints initiative, a campaign aimed at revitalizing under-resourced communities in Charlotte while addressing pressing environmental challenges. This involved attending one of the GreenPrints kickoff events co-hosted by CleanAIRE NC, where NCPHA heard from community members about key environmental challenges in their neighborhoods.

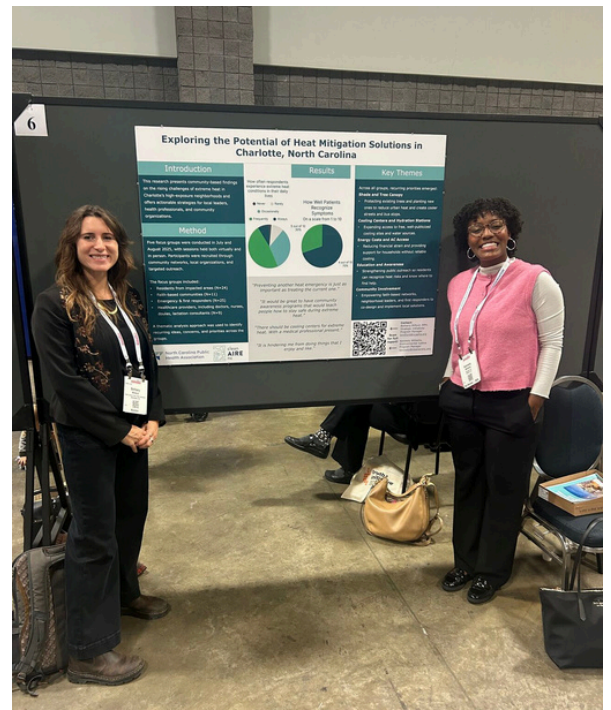
NCPHA also participated in the UNC Charlotte Heat Mapping Campaign with other community volunteers in the Summer of 2024, which involved collecting real-feel temperature data to understand how heat affects Charlotte communities. The results of this campaign are now available to explore in an interactive StoryMap.

NEW PARTNERSHIPS

- **City of Charlotte:** NCPHA has worked closely with partners in the City of Charlotte's Office of Sustainability & Resilience throughout this project and it has been an incredible opportunity to collaborate with a partner outside of public health to advance this work together. The City has been essential in helping to identify other local partners for collaboration and to raise awareness of this work.
- **CleanAIRE NC:** With expertise in environmental justice, CleanAIRE NC was an integral partner for the focus group project.
- **UNC Charlotte:** NCPHA has worked closely with Dr. Katherine Idziorek, who leads the Charlotte Heat Mappers, and is collaborating with the City of Charlotte as part of a Heat Action Cohort.
- **NC DHHS Climate and Health Team:** Although NCPHA works closely with many teams within the NC Department of Health and Human Services, they were introduced to the Climate and Health Team that manages the state's Heat Health Alert System and heat-related illness surveillance reports. This connection has been helpful in ensuring the latest public health data about heat health in NC.

SMART SURFACE POLICIES

While NCPHA hasn't directly made movement on policies, they have worked closely with the City of Charlotte and other partners to increase awareness around extreme heat, advance community engagement, and provide resources for advocacy efforts at the municipal level. The City has been working closely with the Smart Surfaces Coalition independently on specific policies and NCPHA has provided local public health data and communication resources as needed to support these efforts further.



Bethany Milford from NCPHA joined Kennedy Williams from CleanAIRE NC at APHA's 2025 Annual Meeting to present findings from their focus group project as part of the APHA Smart Surfaces grant.